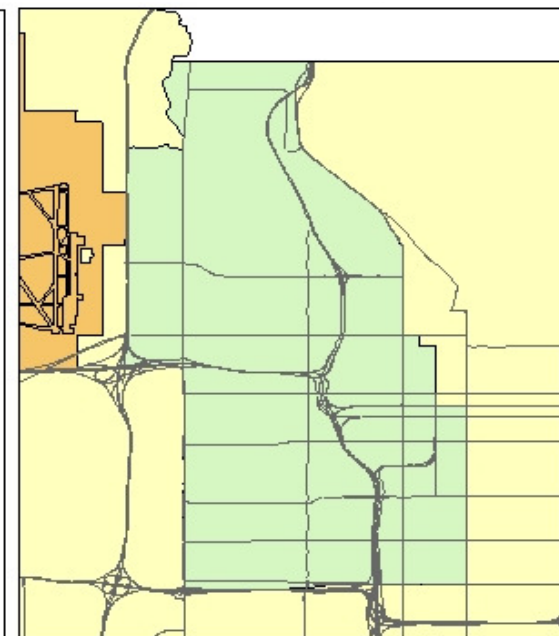
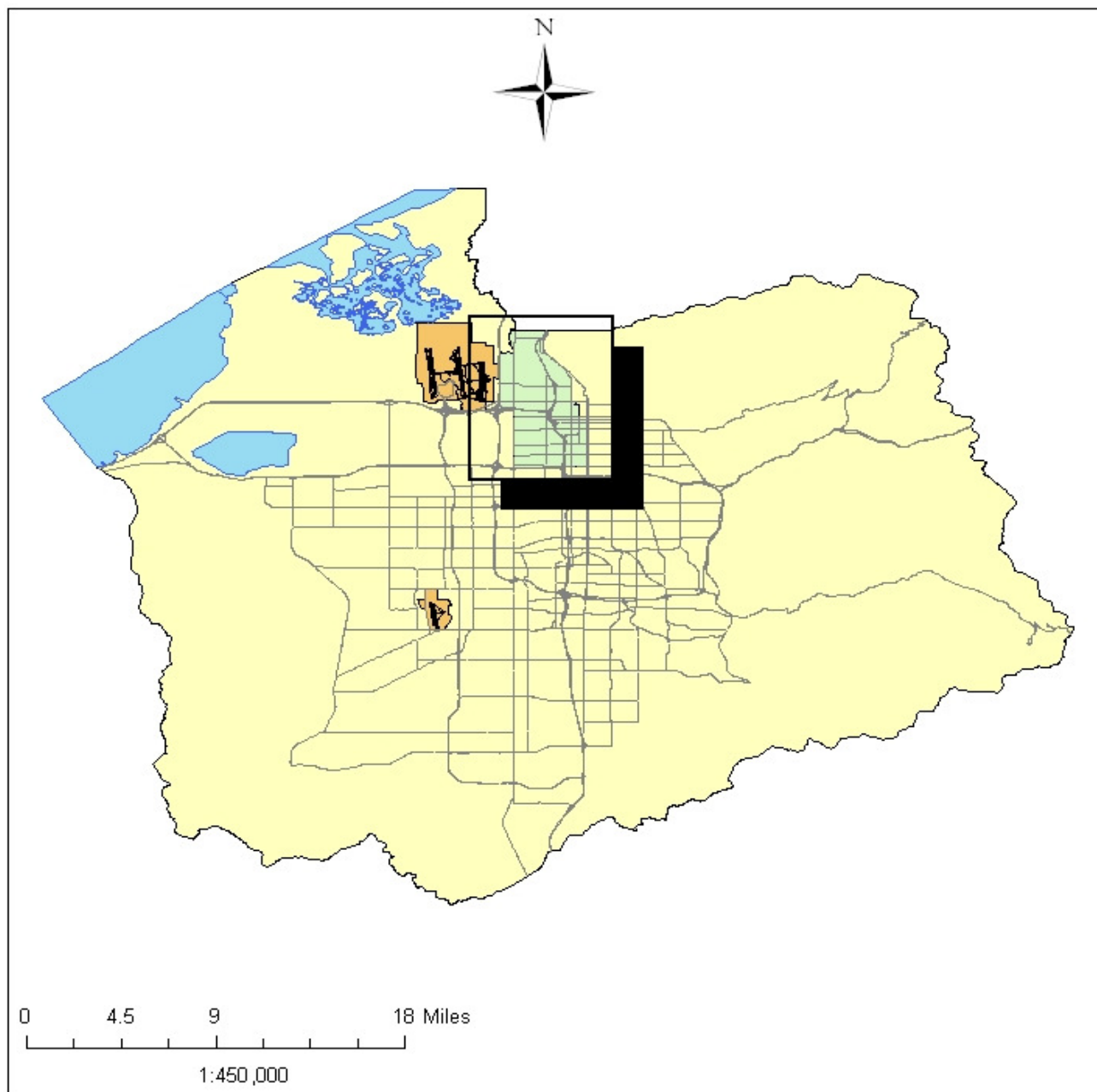


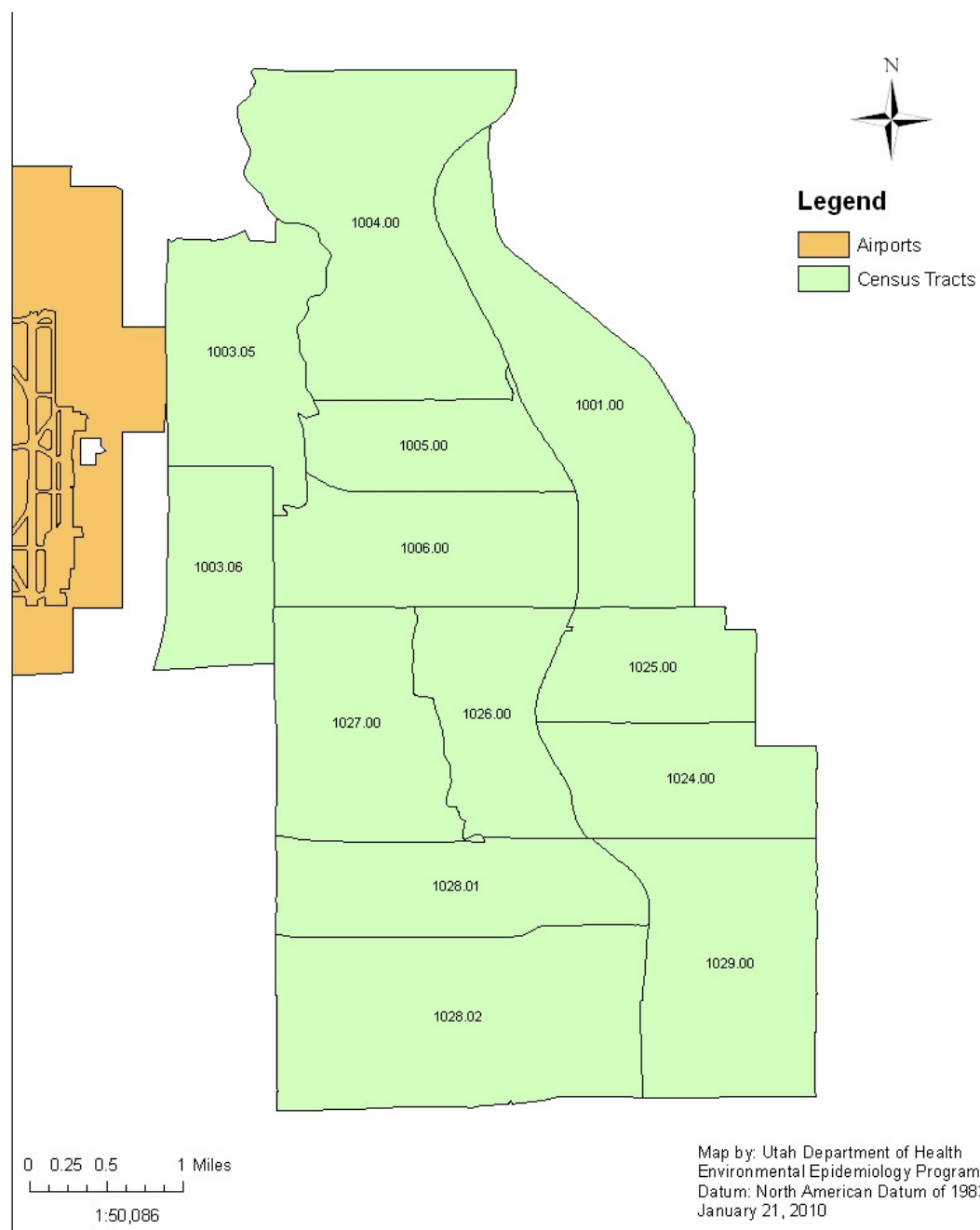
# An assessment of child health in West & Central City Salt Lake City



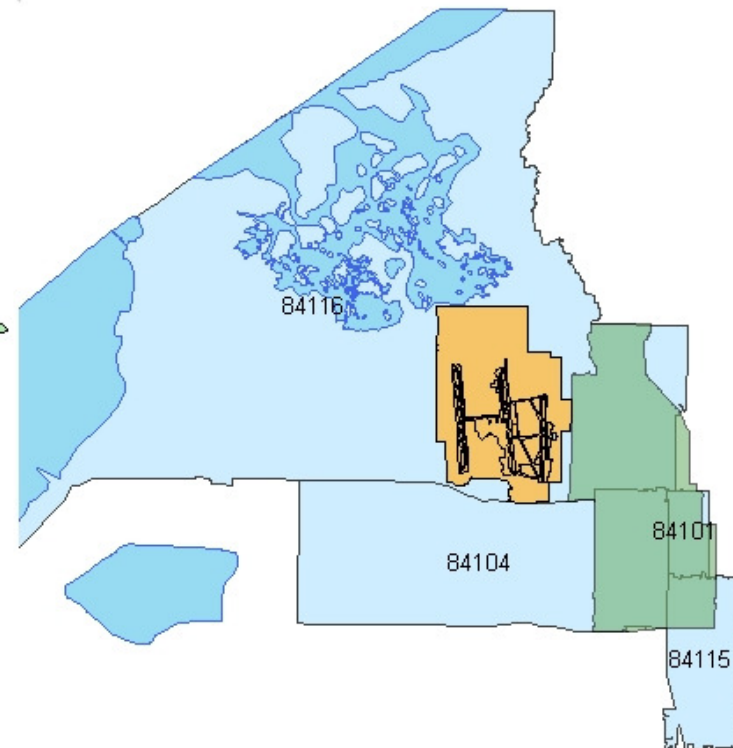
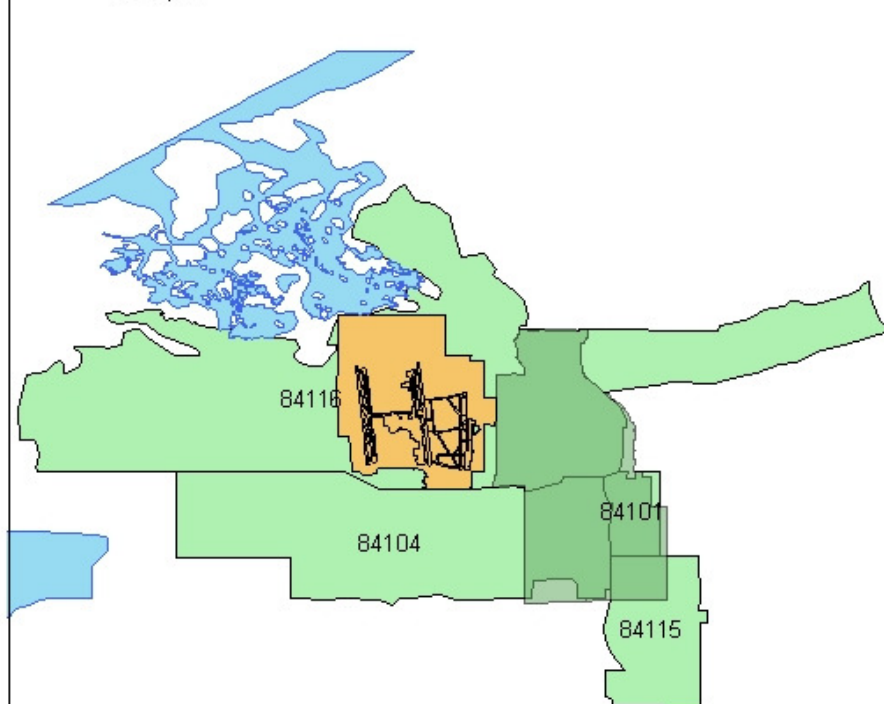
### Legend

- Highways
- Great Salt Lake
- Airports
- Project Area**
- Salt Lake County

Map by: Utah Department of Health  
Environmental Epidemiology Program  
Datum: North American Datum of 1983  
January 21, 2010



0 1.25 2.5 5 Miles  
1:265,000



## Legend

- Great Salt Lake
- Airports
- Project**
- Project**
- Project**

Area  
Area ZCTA  
Area Zip Codes

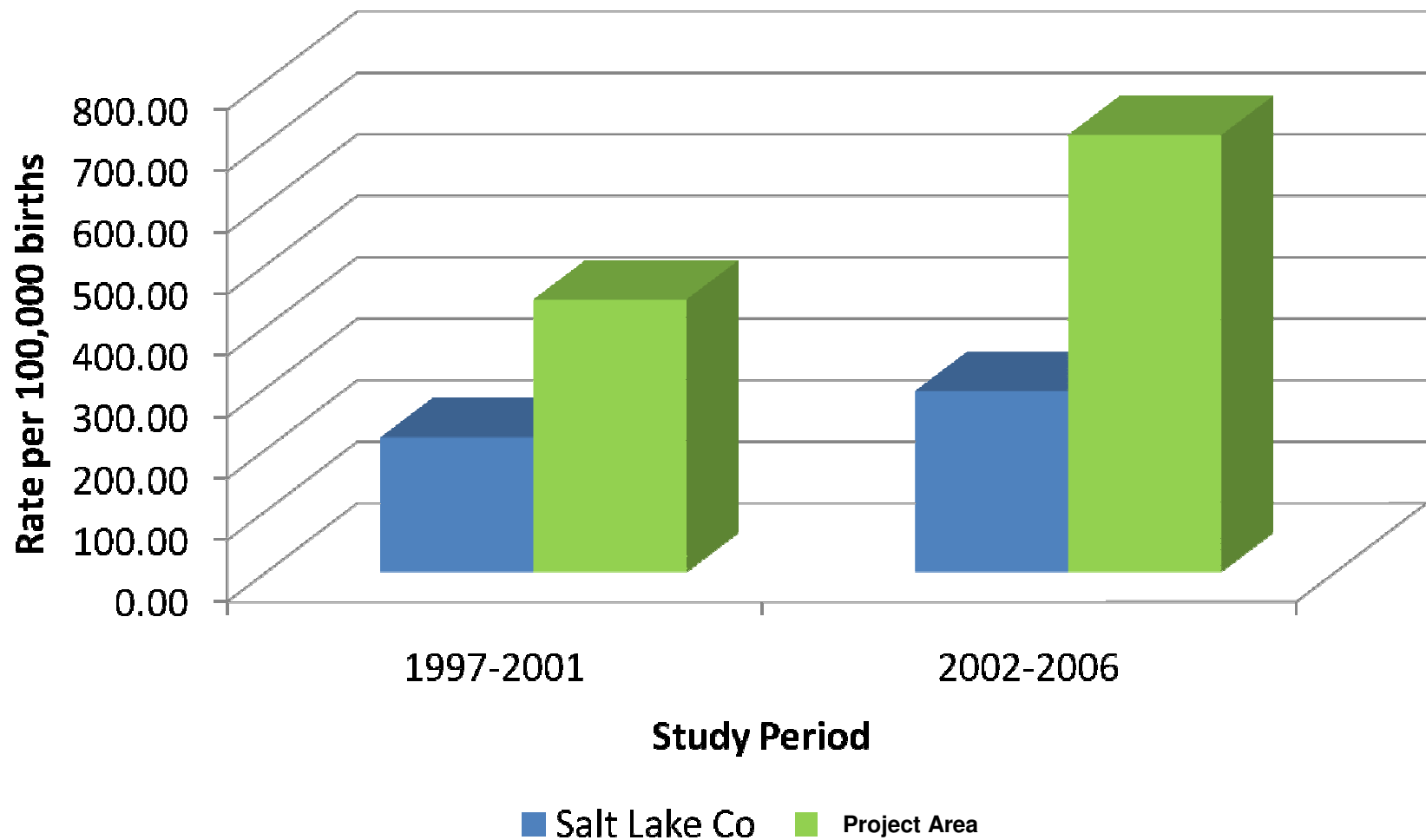
0 1.25 2.5 5 Miles  
1:235,000

Map by: Utah Department of Health  
Environmental Epidemiology Program  
Datum: North American Datum of 1983  
February 1, 2010

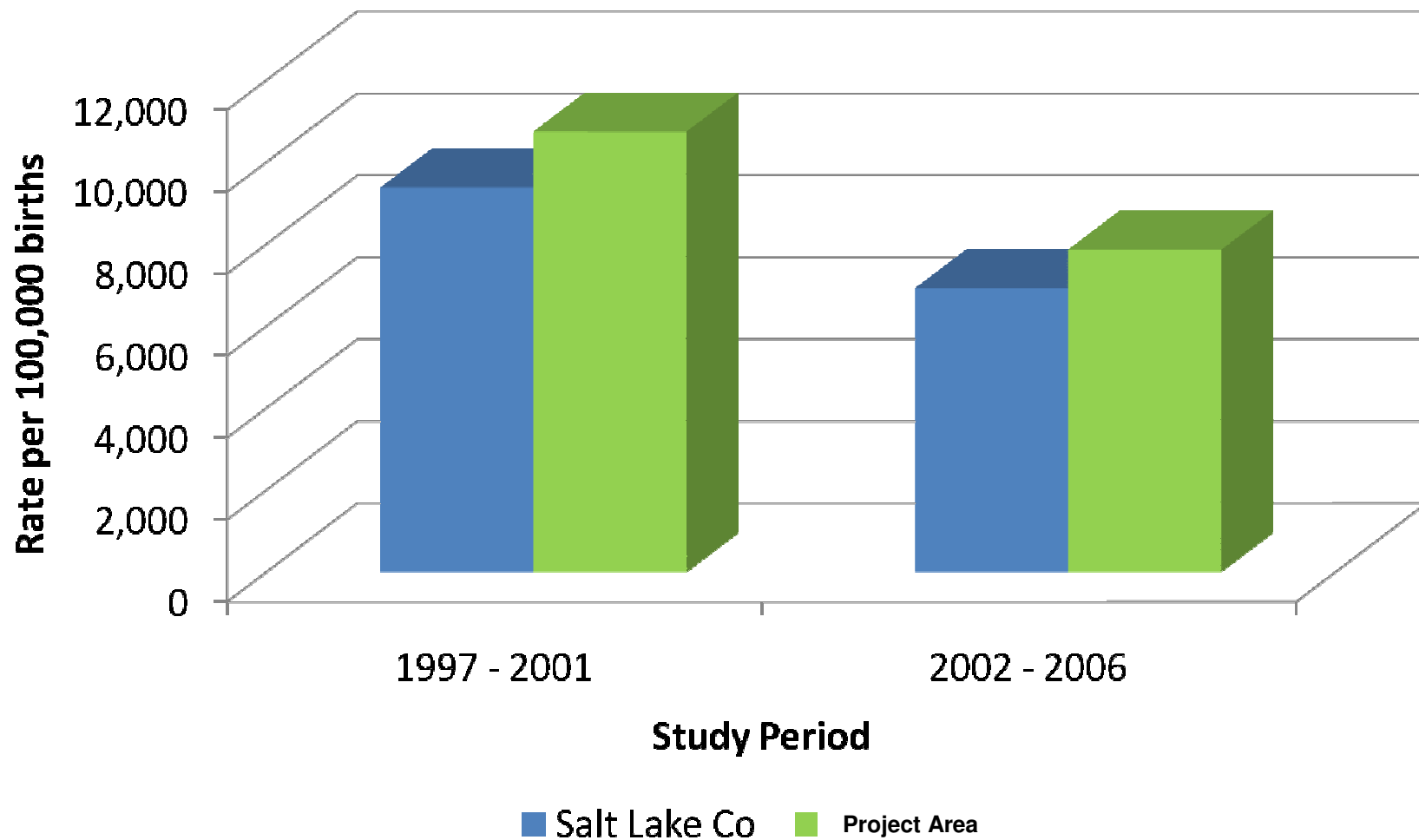
# Risks noted on the birth record

- Maternal substance use during pregnancy
  - Drugs, alcohol, tobacco
- Maternal health issues during pregnancy
  - Anemia, hypertension, heart disease, diabetic, etc.
  - Incomplete cervix and other anatomical concerns
  - History of having problems during pregnancy
  - Blood type issues (Rh sensitivity)
  - Injuries
- Maternal infections during pregnancy
  - Rubella, herpes, meningitis, STDs, etc.

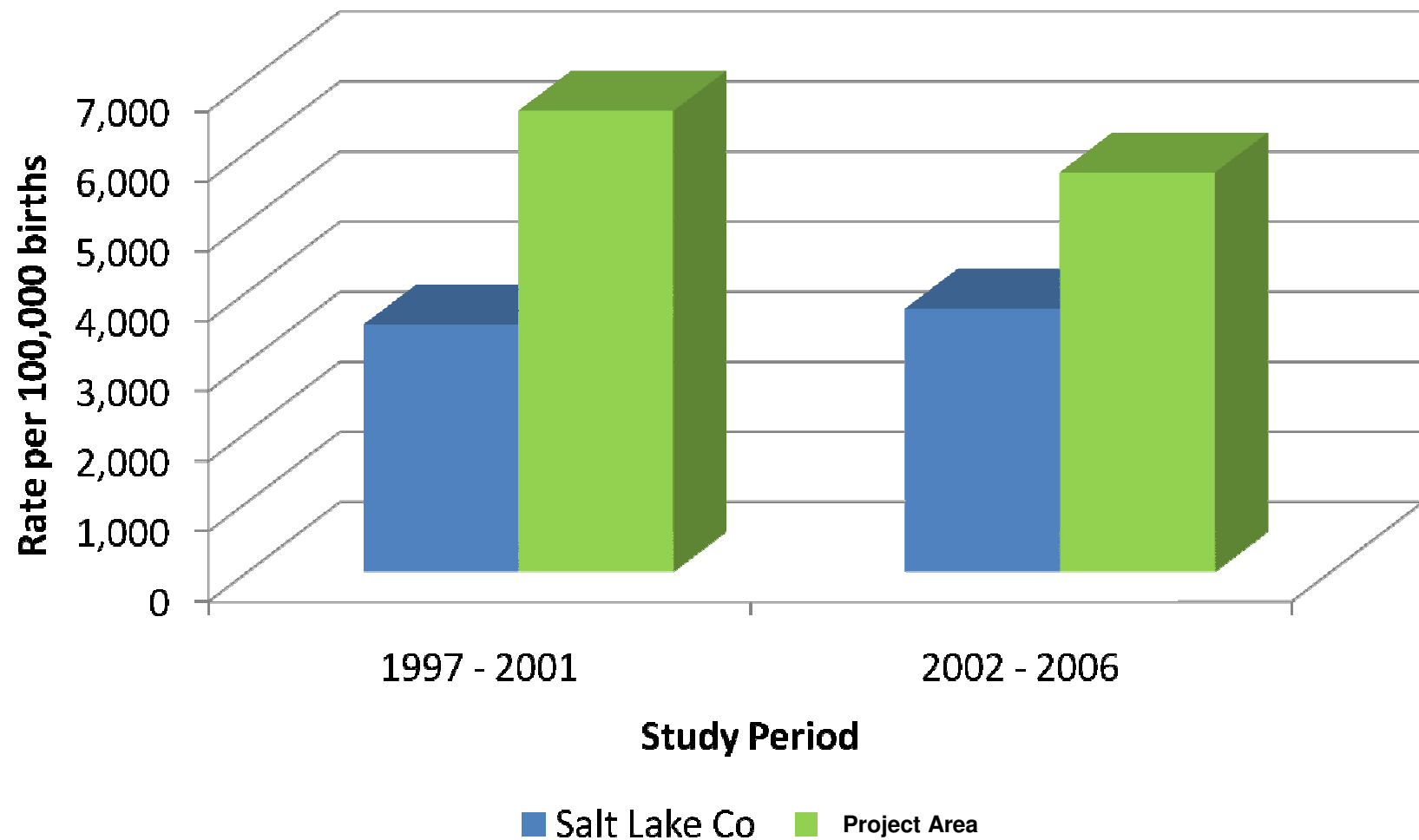
# Maternal substance abuse during pregnancy



# Maternal tobacco use during pregnancy

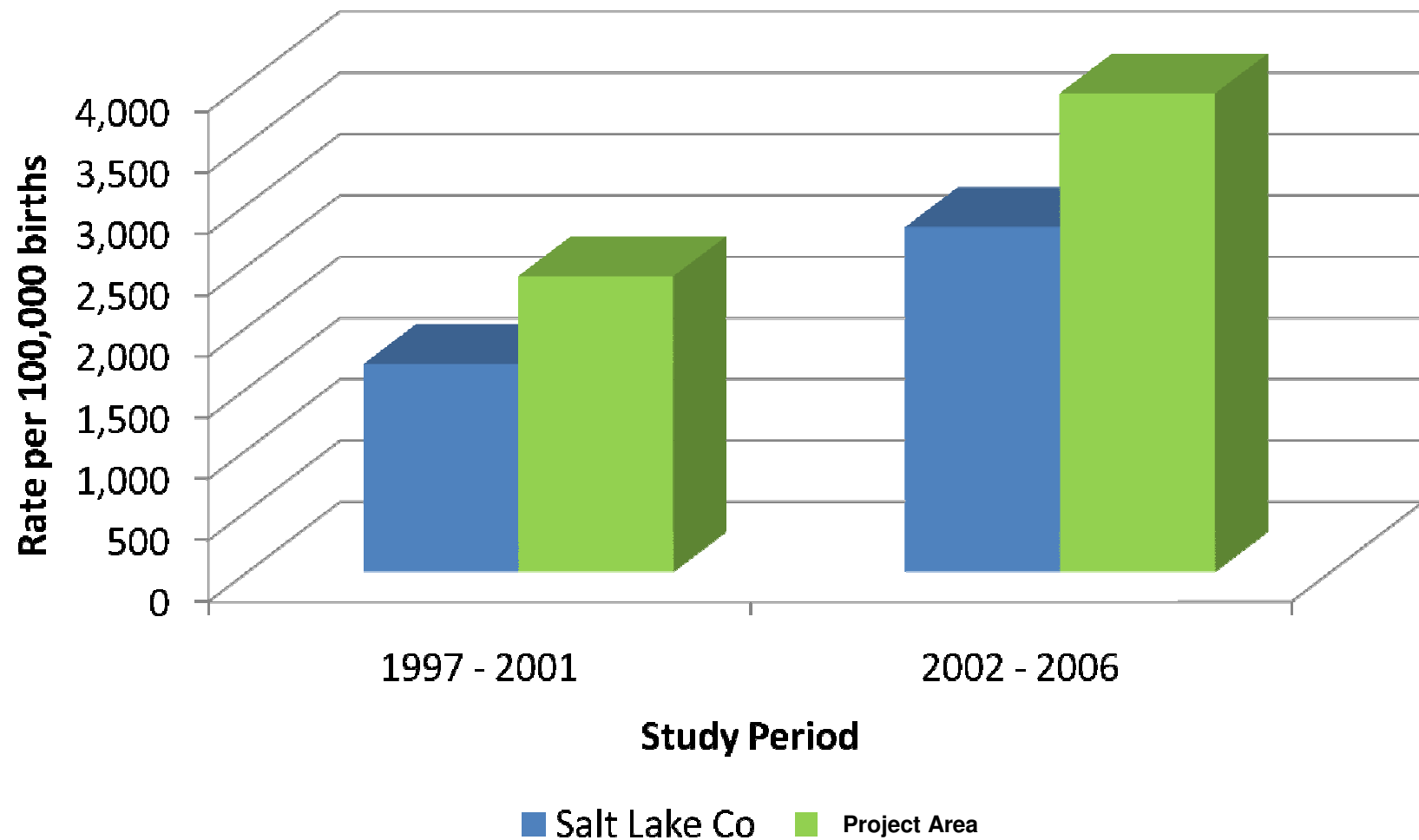


# Maternal anemia during pregnancy

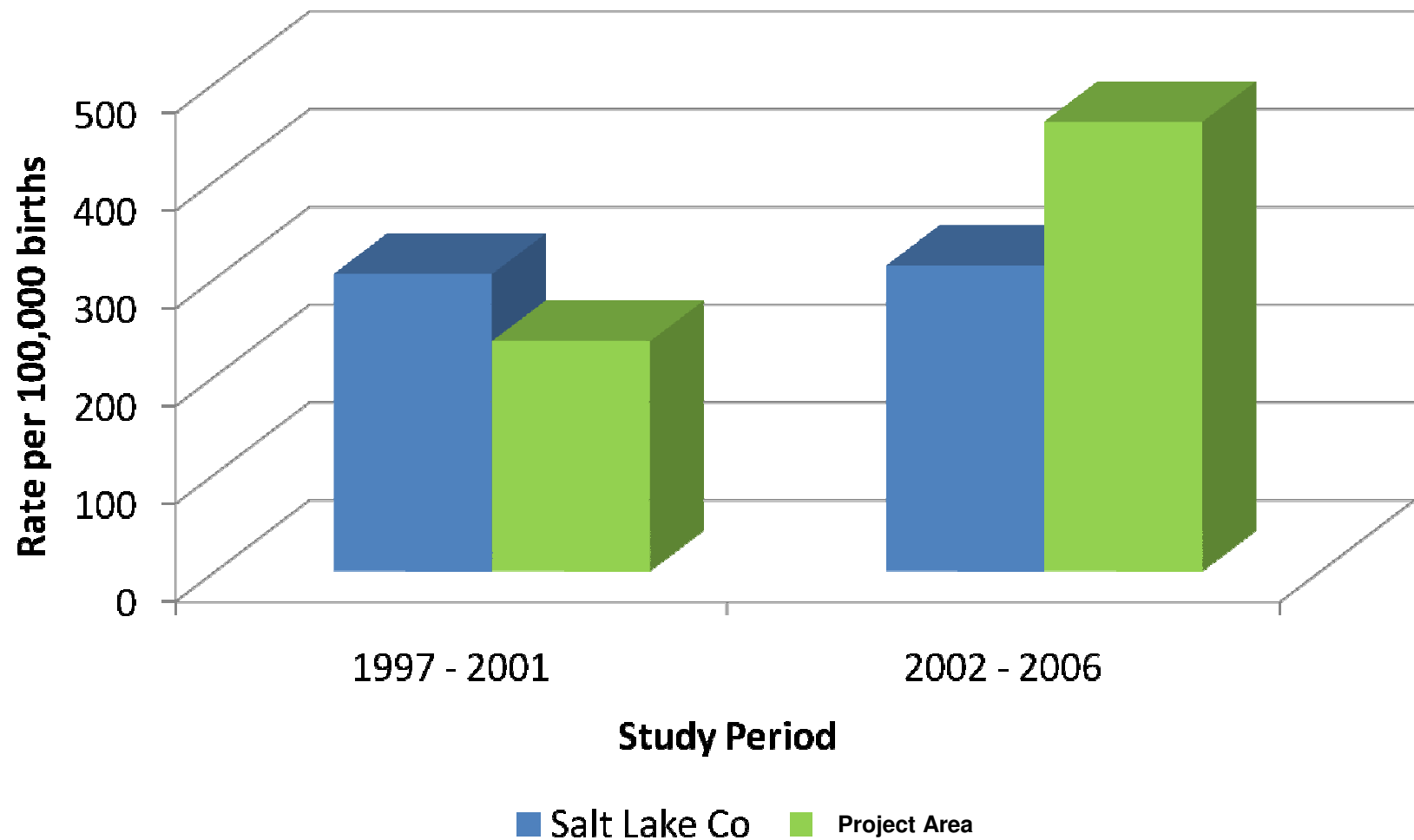




# Maternal develop gestational diabetes during pregnancy



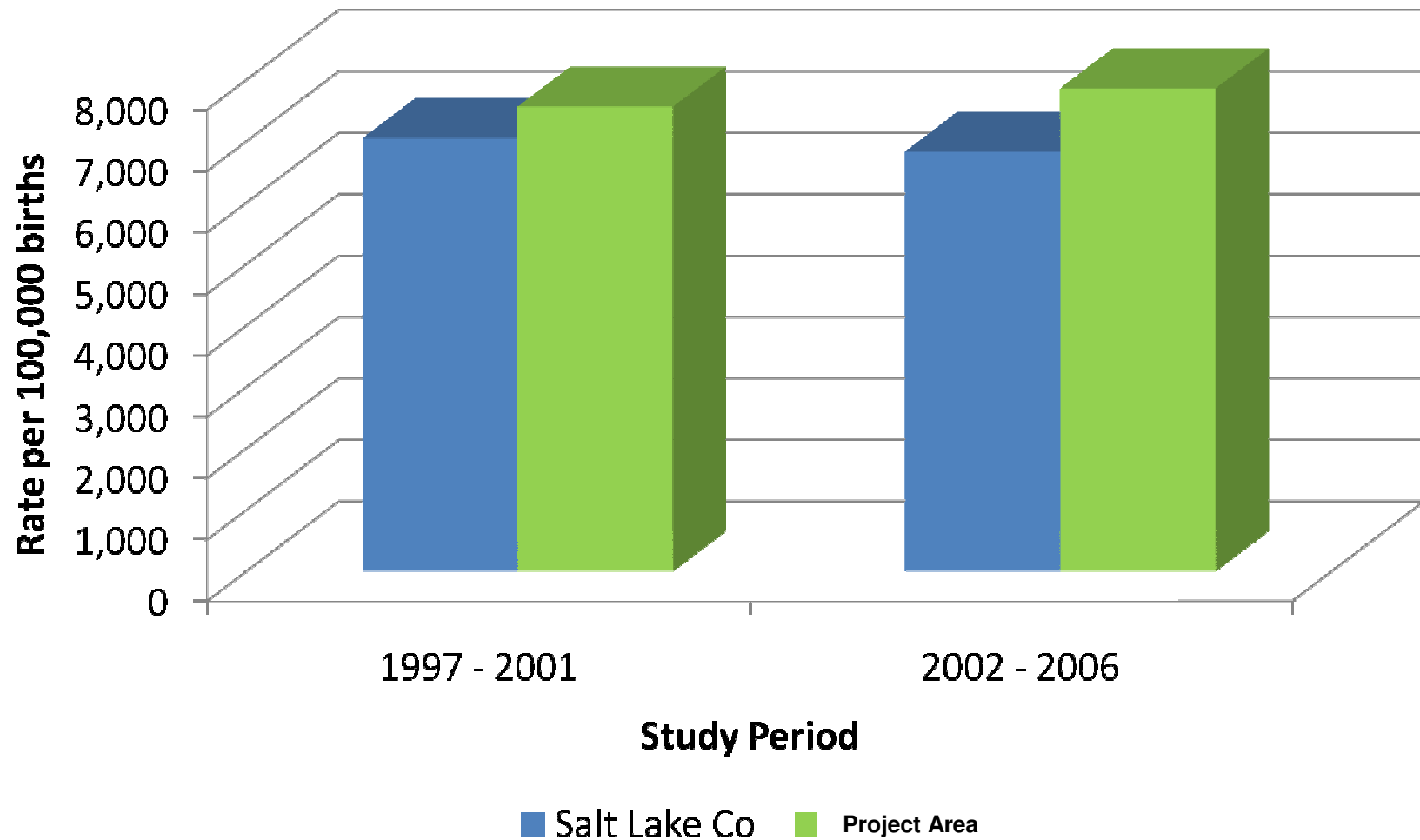
# Maternal develop eclampsia during pregnancy



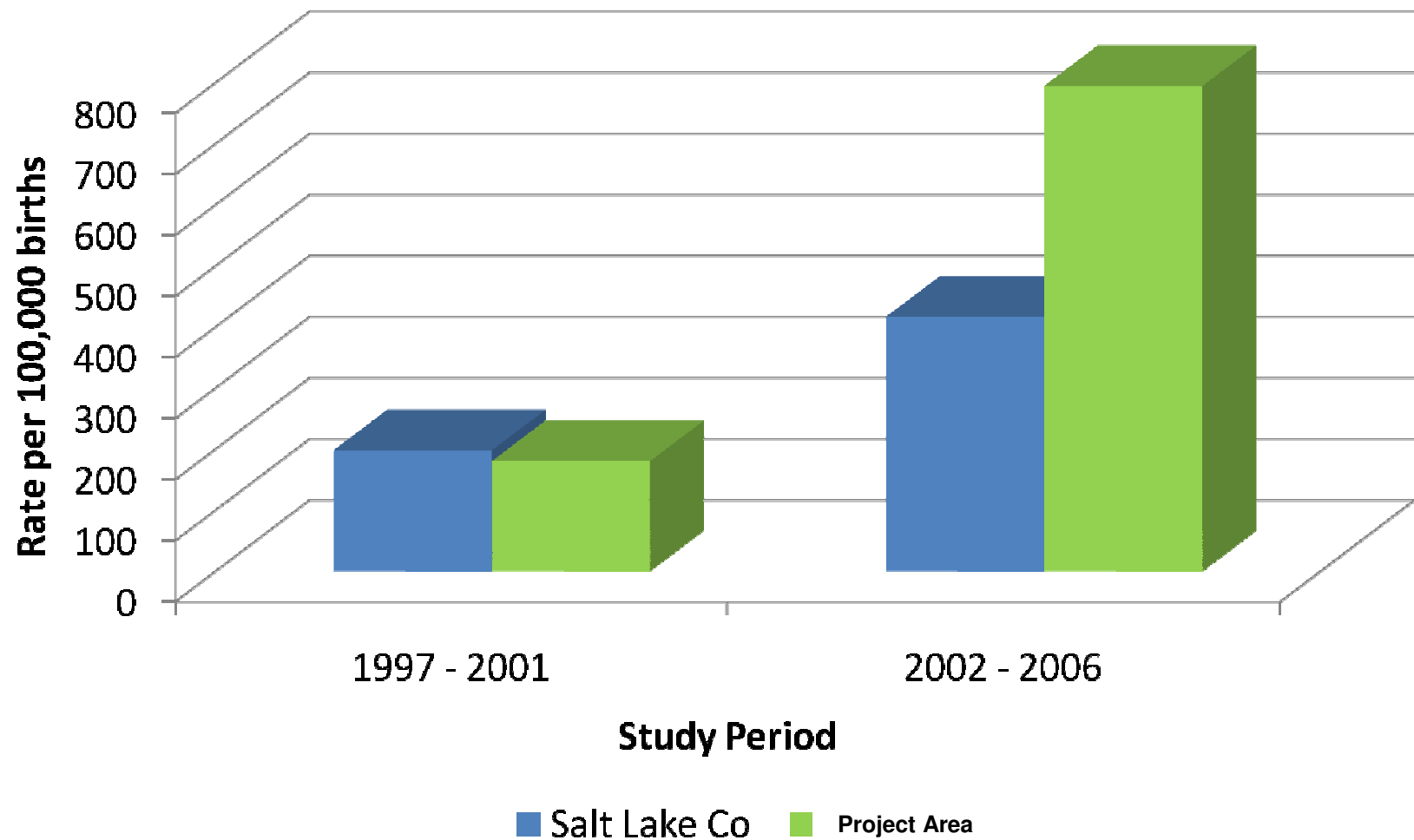
# Birth abnormalities and defects noted at delivery

- Only observable defects are noted
- Abnormalities:
  - anemia, need assistance to breath, low birth weight, pre-term, seizures, infections, etc.
- Defects:
  - Abnormal head (no head, tiny or incomplete, hydrocephaly, cleft lip/pallet, etc.)
  - Abnormal appendages (club foot, extra or missing digits, malformed genitalia, etc.)
  - Abnormal internal organs (heart, lungs, liver, gastrointestinal, central nervous system, bones and muscle, urinary, etc.)
  - Developmental problems (Downs syndrome, fetal alcohol syndrome, etc.)

# Low birth weight babies



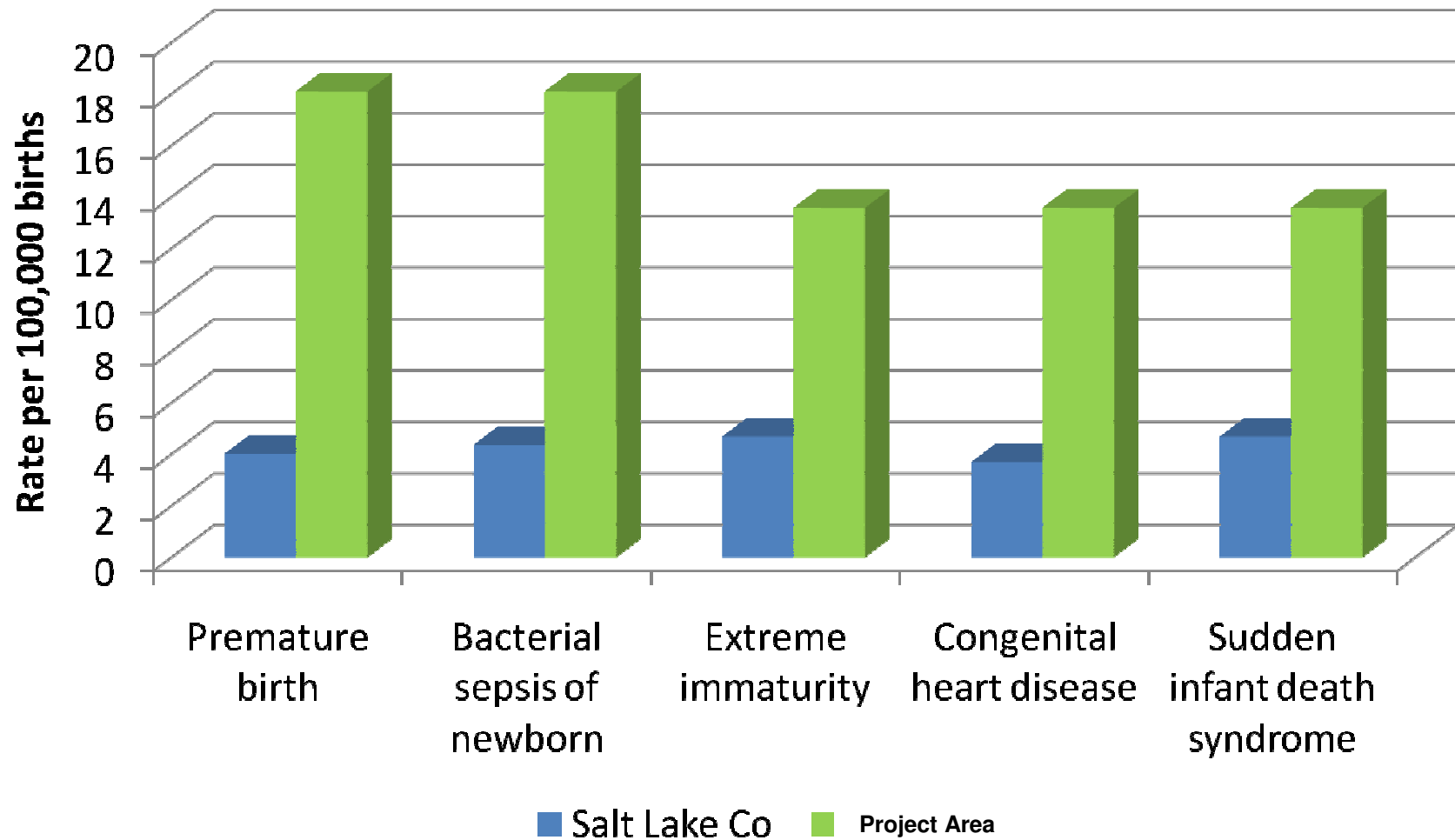
# Babies with muscle or skeletal abnormalities



# Infant and child deaths

- Included children 0 to 18 years of age
- For 2003 through 2007
- Death record includes
  - Primary cause of death
  - Up to 9 contributing causes of death
- We looked at top 5 causes of infant and child death

# Leading causes of infant and child death (2003-2007)



# Cancer Data

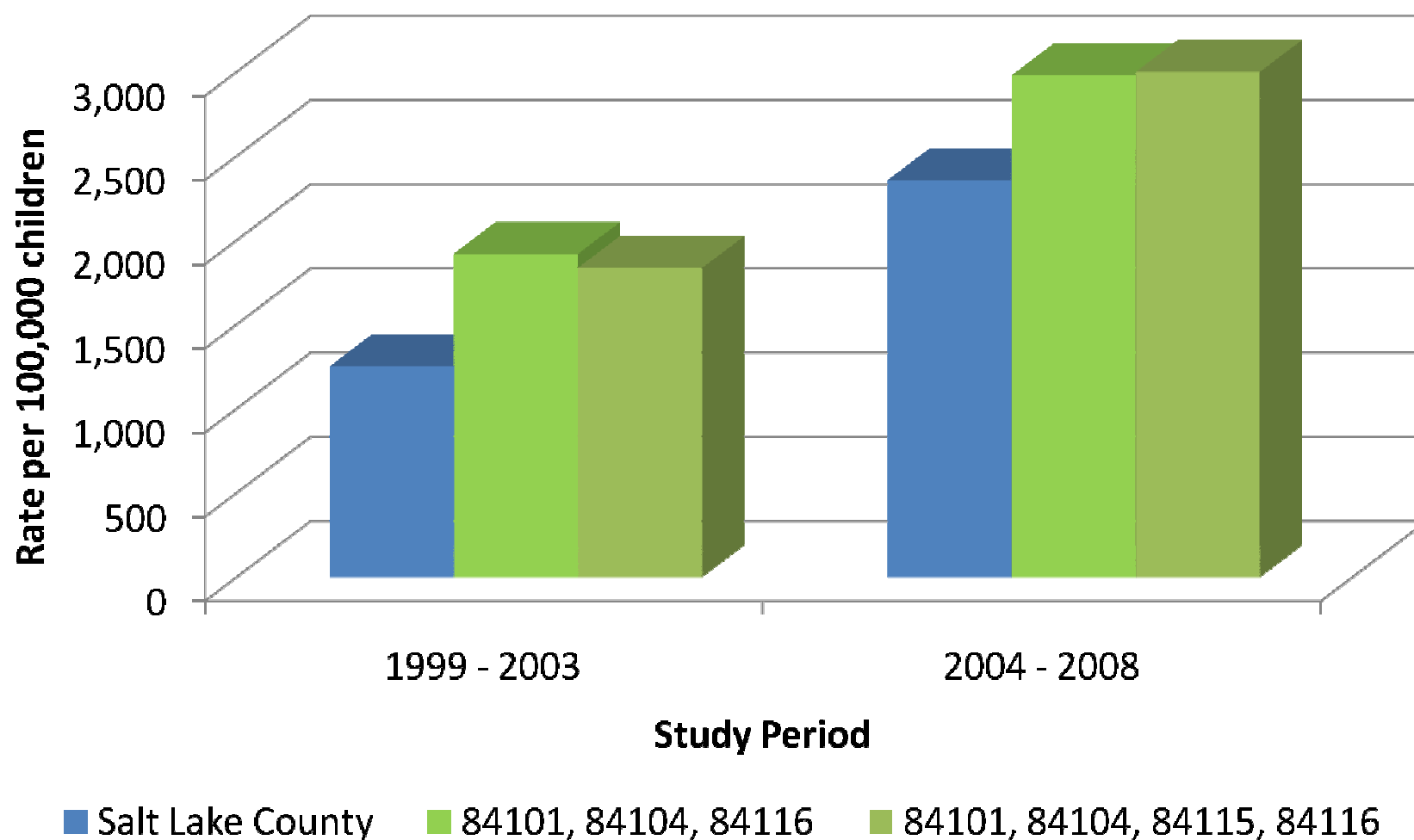
- Cancer in children is very rare
- Examined 42 different major categories of childhood cancer
- No significant increased rates of cancer found



# Blood lead

- Lead is a metal contaminate that can be absorbed in the blood.
- Lead causes a number of childhood health and developmental problems
- In Utah children with a blood lead level greater than 10 ug/dL of blood are considered to have elevated blood lead levels

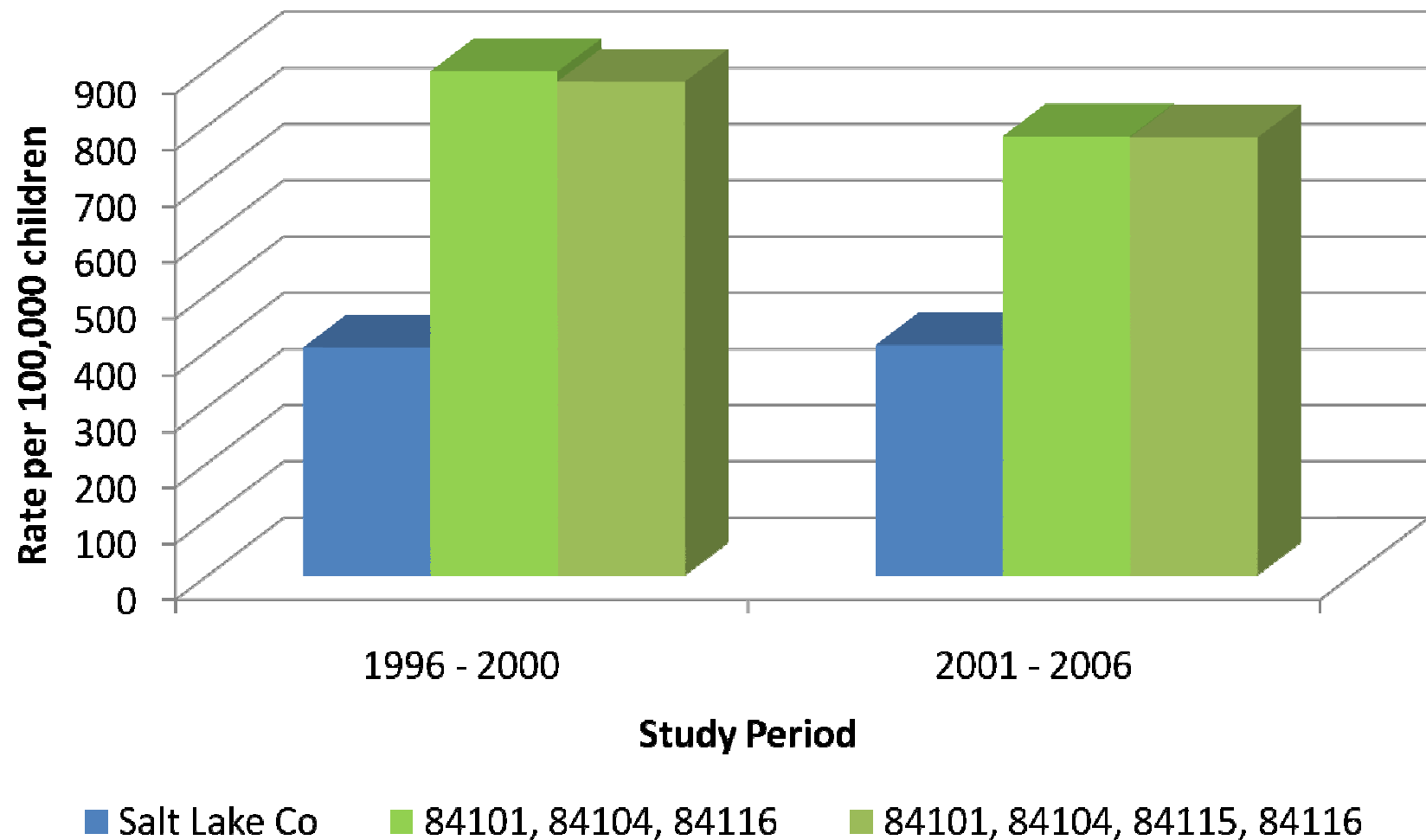
# Children with elevated blood lead levels



# Hospital and Emergency Department Data

- Unintentional injuries are a leading cause of hospitalization or emergency department encounters of children
- Hospitalization and Emergency Department visits for unintentional injuries was not elevated

# Children hospitalized or visiting an emergency department because of asthma



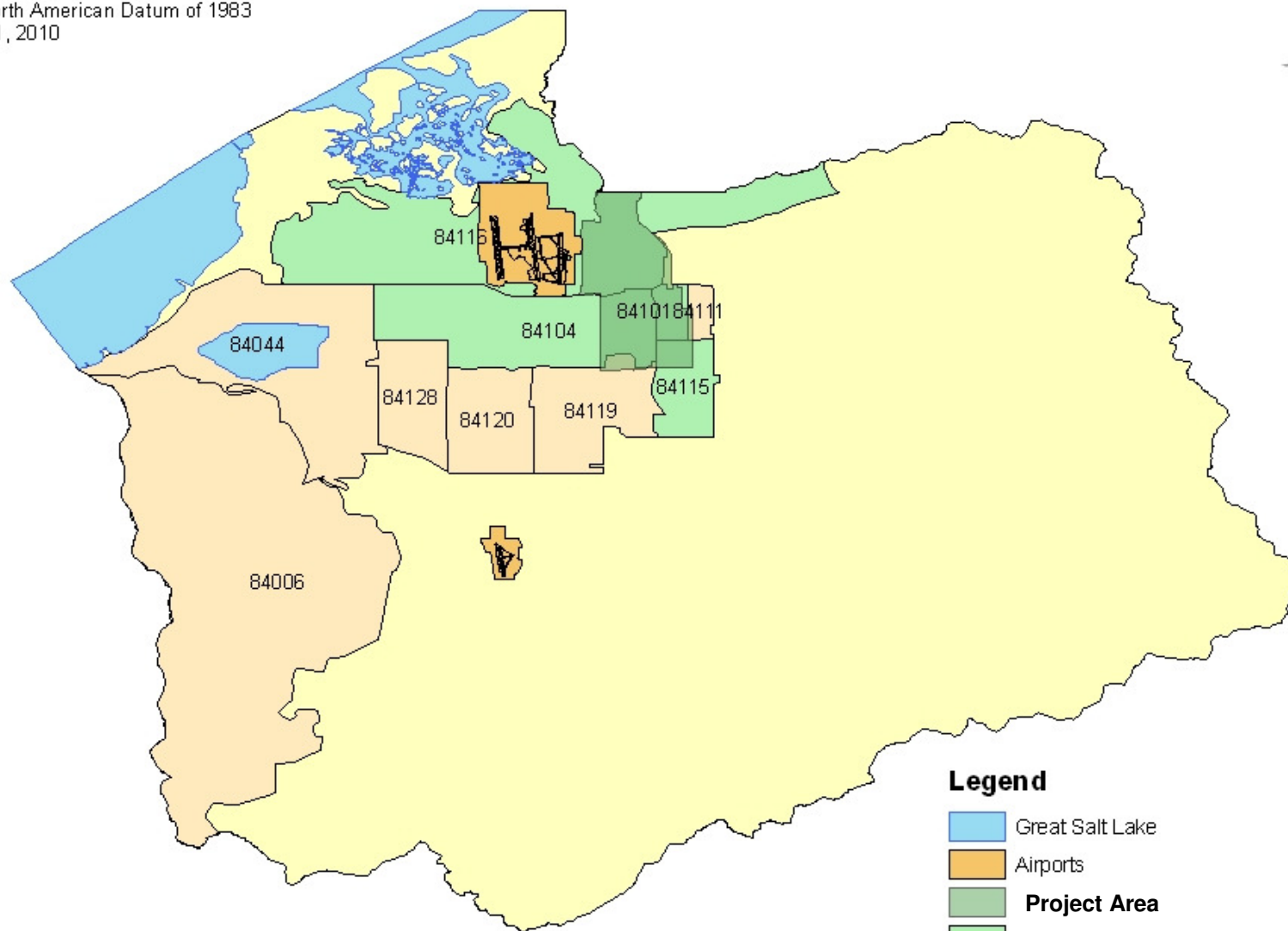
# Conclusions

- The project area has a number of child health concerns:
  - Poor birth outcomes (preterm, low birth weight)
    - Maternal health and behavior
  - Asthma

# Similar populations

- These results look at the project area versus Salt Lake County
  - We also looked at the project area versus the State of Utah
- And*
- The project area versus an area of Salt Lake County with similar demographics as the project area
  - **The interpretation remains the same**

Map by: Utah Department of Health  
Environmental Epidemiology Program  
Datum: North American Datum of 1983  
January 21, 2010



### Legend

- Great Salt Lake
- Airports
- Project Area**
- Project Area**
- Salt Lake County Hispanics ZCTA
- Salt Lake County

0 2 4 8 Miles

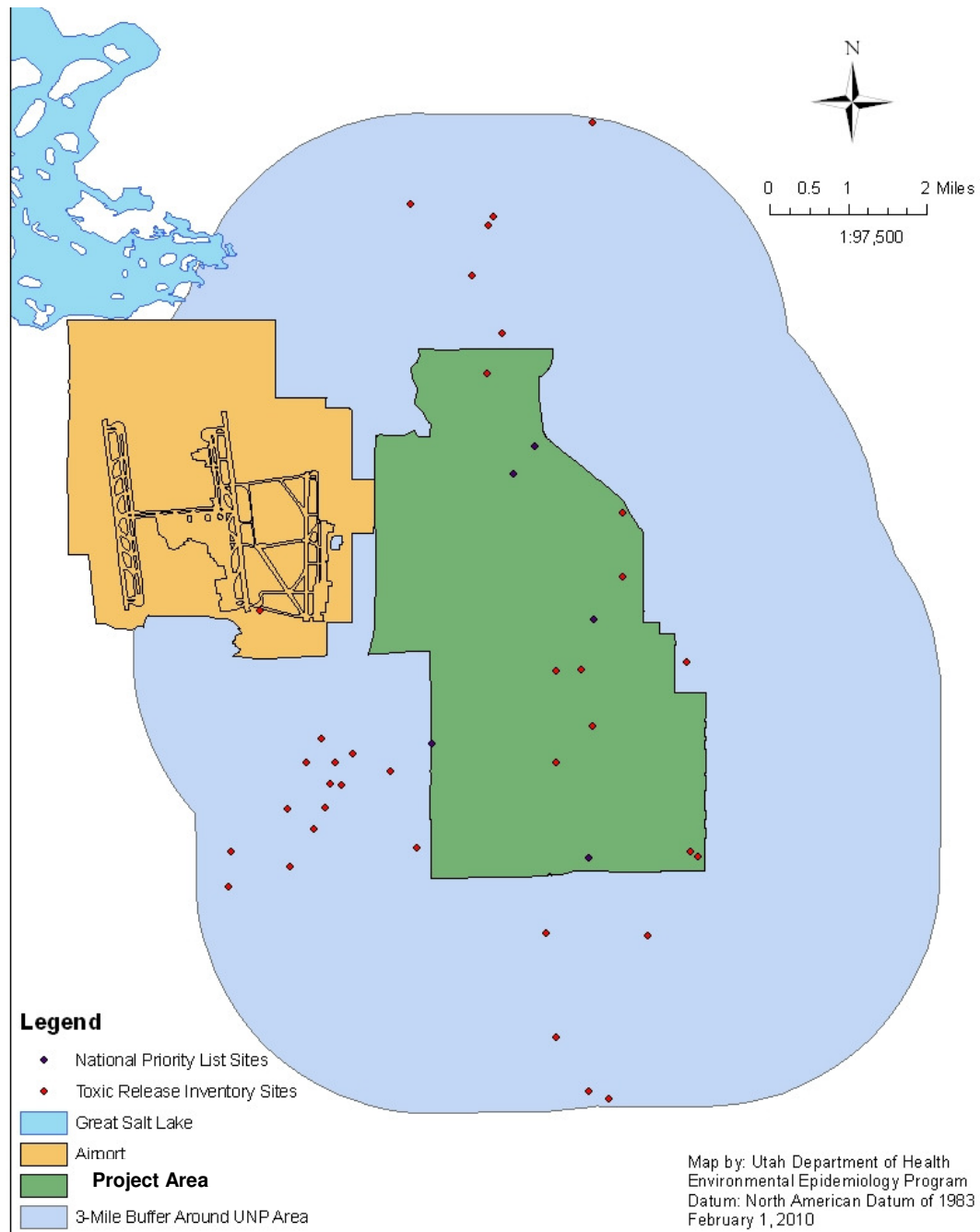
1:350,000

1  
ZCTA

# Environmental Risks

- Site specific
  - National Priority List (NPL or Superfund) sites
  - Toxic Release Inventory sites
- Ambient condition
  - Air pollution
  - Healthy homes





# Top 5 air pollutants (National Air Toxics Assessment)

